

To: Senate Health & Welfare Committee;
House Health Committee
From: Ashley Reed, TennCare Director of Legislation
Date: February 28, 2023
Subject: Perinatal Annual Report

Pursuant to Tennessee Code Annotated **68-1-806**, the Division of TennCare, in consultation with the Perinatal Advisory Committee, would like to provide a summary of initiatives and outcomes in perinatal care for calendar years 2019-2021.

TennCare and our contractors remain committed to providing high-quality, cost-effective health care to Tennessee's perinatal population. The Managed Care Organization (MCOs), Amerigroup, BlueCare, and UnitedHealthcare Community Plan, prioritize serving pregnant women through various initiatives led in collaboration with TennCare.

The following four primary goals are outlined by our Managed Care Organizations (MCOs):

- Reduce maternal deaths,
- Reduce neonatal and fetal deaths,
- Reduce preterm births,
- Improve other key performance indicators to improve maternal care.

To reach the goals above, the MCOs have developed initiatives to engage pregnant women early in prenatal care and, in particular, identify and engage women at high-risk for complications in pregnancy. A variety of methods (e.g. claims data, labs, provider notifications, health-risk assessments, admission/discharge/transfer feeds, and presumptive-eligibility enrollment files) are used to identify newly pregnant members as early as possible. Early entry into prenatal care remains a priority. Incentives are offered by the MCOs to in-network providers for the completion and return of the Maternity Notification Form, a document that provides the MCOs with early notification of a pregnancy and clinical and social factors which may increase the risk of that pregnancy. Incentives are also offered by the MCOs to all pregnant women to encourage early entry into prenatal care and attendance of the postpartum visit after childbirth.

In addition to the focus on early entry into prenatal care for all women, a particular focus is placed on pregnant women who may be at increased risk for having a poor maternal outcome or poor infant outcome. Examples of these include women with a history of preterm birth, substance use disorder, tobacco use, behavioral and mental health conditions, diabetes, homelessness, lack of transportation, and hypertension in pregnancy. All three plans have programs that aim to identify at-risk pregnancies via health risk assessments and stratify members into levels of risk. Included in these health risk assessments are mental health screening tools, for which all three MCOs provide incentives to in-network providers for their administration during the prenatal and postpartum periods.

Based upon this stratification, varying levels of outreach and engagement with additional education, coordination, and support through personalized case management is offered. For those members who are stratified into high-risk maternity (maternity populations at high-risk for complications), a dedicated obstetric (OB) care management team offers one-on-one support. In addition to dedicated case management teams

within each MCO, persons with specific areas of concern may be referred to community resources and the Department of Health program BABY & ME – Tobacco Free Program™ for tobacco users in pregnancy.

Throughout the pregnancy, all pregnant women are provided access to information on topics such as “what to expect during pregnancy,” common medical and behavioral conditions such as anemia, oral health, prenatal vitamins, peripartum depression and anxiety, and the appropriateness of additional doctor or emergency visits. Women are also provided information on the standard timing of visits to ensure follow-up appointments are met. The MCOs provide this information via various modalities (mail, text, phone) based on the preferred method or methods identified by the patient. Additionally, in response to the COVID-19 public health emergency, the MCOs are supporting the use of telehealth in prenatal care and have invested in digital solutions to engage and educate members as well. Given that health risks continue into the postpartum period, all three MCOs offer additional incentives for in-network providers to complete up to two postpartum care encounters within 12 weeks of delivery.

While significant progress has been made against the opioid epidemic in Tennessee, TennCare recognizes the continued impact of opioids on the state. Coverage limits, enacted in 2018, aim to limit the opioid prescriptions for new and naïve users, preventing the development of opioid misuse, abuse, and addiction. Since 2015, the number of new and acute users of opioids reduced by over fifty percent. In collaboration with the TennCare’s Pharmacy Benefits Manager, the MCOs continue to perform outreach and offer intervention to women of childbearing age who are identified through predictive algorithms to be at increased risk for opioid misuse. Lastly, TennCare recognizes the value of medication assisted treatment (MAT) for those afflicted by substance use disorder. In addition to coverage of office-based MAT services, TennCare covers MAT in Opioid Treatment Programs for members who require a higher level of care as well as intensive outpatient and residential treatment. While preconception planning is recommended for all women with SUD, the MCOs recognize the benefits of MAT in pregnancy and have programs in place to identify, outreach, and engage members in opioid abuse programs. The MCOs maintain a network of high-quality MAT providers (physicians, nurse practitioners, and physician assistants) under the Buprenorphine Enhanced and Supportive Medication Assisted Treatment and Recovery program across the state to increase access to treatment for opioid use disorder. Pregnant women who are on MAT, as opposed to misusing opioids or using illicit drugs, see a reduction in withdrawal episodes and high-risk drug-seeking behavior, and are more likely to be compliant with prenatal care. Infant outcomes are also improved as they are more likely to deliver at term (37 weeks or greater) and less likely to deliver a low-birth-weight baby. Research suggests MAT may result in a reduction in the incidence and severity of neonatal abstinence syndrome, which affects newborns soon after birth due to exposure to various substances including opioids while in the womb. Vanderbilt University Medical Center and TennCare are in year four of the Maternal Opioid Misuse collaborative, a \$5.3 million-dollar grant through the Centers of Medicare and Medicaid Services. The program, which began enrollment in Summer 2021, aims to provide an innovative approach to support women with substance use disorder and children with neonatal substance exposure throughout the perinatal period and extending thereafter with coordinated behavioral, addiction, and obstetric care offered within a single site and comprehensive ancillary services.

TennCare and its managed care organizations also partner and support the work of key state agencies and community organizations on specific initiatives to improve outcomes for both pregnant women and their babies. Examples of such partnerships and collaborations include:

- Community investments in maternity supportive workforce such as community health workers,

- doulas, and lactation consultants
- MCO-sponsored health equity grants
- Partnerships with state agencies focused on reductions in maternal morbidity and mortality
- MCO use of purpose-built tools to connect women and their families with local healthcare resources

TennCare continues to partner with and support the Tennessee Initiative for Perinatal Quality Care (TIPQC). TIPQC's current projects, which launched in 2022, focus on promotion of vaginal delivery and optimal cord clamping. The 2021 initiative to reduce maternal morbidity and mortality of severe maternal hypertension continues. Past examples of collaborative initiatives include reduction of primary cesarean section rates, elective delivery prior to 39 weeks, diagnosis and management of Neonatal Abstinence Syndrome, and access to long-acting reversible contraceptives to reduce short inter-pregnancy intervals and unintended pregnancies. The MCOs also utilize Community Health Access and Navigation in Tennessee (CHANT) Care Coordination to assist women and new mothers in navigating healthcare services in Tennessee available to pregnant and postpartum adolescents and women and children (birth-21 years of age).

Convened in 2017, under the guidance of Tennessee Department of Health, Tennessee's Maternal Mortality Review Committee, completes a comprehensive review of all potential deaths during pregnancy or within one year of the end of pregnancy. The report summarizes the causes of death and associated factors in two parts of the afflicted population: pregnancy-related death where pregnancy contributed to the outcome, and pregnancy-associated death where a death occurred during pregnancy or within one year of the end of pregnancy however the pregnancy was not determined to contribute to the death. Since the establishment of the Maternal Mortality Review Committee, the process and methods used to determine pregnancy-associated deaths is different from years prior and therefore cannot be compared with years prior to 2017. For further detail, please refer to the annual Maternal Mortality Reports which are available [here](#). Note, at this time the data for calendar year 2021 is not yet available and the report will be available later in 2023.

The analyses from Maternal Mortality Review Committees both in Tennessee and nationally reveal the postpartum period beyond the initial 6 weeks remains a particularly vulnerable period in a mother's life. Since April of 2022, all mothers who were eligible and enrolled in TennCare Medicaid during pregnancy continued to have 12 months of postpartum coverage, an expansion from 60 days. Supporting our mothers during this time of transition will allow for a mother to access continued care for all physical and behavioral health needs, eliminate churn, and maintain provider relationships which are key to maintenance of health and management of disease states.

In addition to extension of the postpartum period, TennCare began supporting Medicaid moms with access to dental benefits during a pregnancy and the 12-month postpartum period starting in April of 2022. In January of 2023, these benefits were expanded to the entire adult population on Medicaid. Periodontal disease, or inflammation of the gums and surrounding soft tissue, can be passed from caregiver to child. This process, called vertical transmission, plays a significant role in the development of dental caries in children. These dental benefits for women who are pregnant or postpartum will contribute to the prevention and treatment of maternal tooth decay.

Established in 2014, the perinatal episode of care, incentivizes providers to improve the quality of care provided throughout the entire perinatal period. Quality measures are tracked and reported to providers;

certain measures are tied to financial reward for high-quality, cost-effective care. TennCare continues to update the episodes of care program, reviewing quality measures and incorporating feedback from providers to best capture and promote the quality of care provided to TennCare members.

TennCare and our MCOs track and monitor a variety of key measures related to these initiatives to determine effectiveness of our efforts at improving perinatal outcomes in each region. Provided below are statistical data of these measures from the past three years, 2019 to 2021. In Table 1, there are three levels of data included: state level (indicated as Tennessee), births restricted to TennCare members (indicated as TennCare), and births restricted to perinatal episodes of care (indicated as Episodes). Data from perinatal episodes of care differs in that due to exclusions of certain high-risk pregnancies the rate of cesarean births within Episodes of Care may be lower than the rate of cesarean births for the overall population. As noted previously, the Maternal Mortality Review report for 2023 is pending, therefore the data for calendar year 2021 is not available at this time. As always, the Division of TennCare hopes you find this information useful and please let us know if you have questions with this report.

Table 1. Perinatal Outcomes, Maternal and Infant Measures

Perinatal Outcomes		2019	2020	2021
Maternal Measures				
Tennessee	Births Among 15-19-Year-olds, Tennessee, rate per 1,000 ^{1*}	23.7	23.5	21.5
	Pregnancy-Related Mortality ratio, per 100,000 live births ^{2*}	28.6	58.5	Not available
	Pregnancy-Associated Mortality ratio, per 100,000 live births ^{2*}	77.1	124.5	Not available
TennCare ³	Timeliness of Prenatal Care, TennCare	83.7%	81.9%	84.1%
	Postpartum Care, TennCare	70.2%	72.7%	73.6%
	Cesarean section, all, TennCare ^{1*}	30.8%	31.3%	32.3%
Episodes ⁴	Screening for HIV	94.4%	91.5%	87.2%
	Cesarean section, episodes*	29.8%	29.6%	29.7%
	Screening for gestational diabetes	85.5%	86.7%	87.3%
	Screening for asymptomatic bacteriuria	84.2%	83.1%	82.3%
	Screening for hepatitis B surface antigens	90.4%	86.6%	Retired
	Tetanus, diphtheria, pertussis (Tdap) vaccination	81.3%	81.8%	80.5%
Infant Measures				
Tennessee ¹	Preterm Births (<37 weeks), Tennessee*	11.2%	10.9%	11.3%
	Low birthweight births (<2500g), Tennessee*	9.2%	8.9%	9.3
	Fetal Mortality, Tennessee, rate per 1,000 live births and fetal deaths*	6.2	6.5	6.6
	Neonatal Mortality, Tennessee, rate per 1,000 live births*	4.5	3.9	3.2
	Infant Mortality, Tennessee, rate per 1,000 live births*	7.0	6.3	6.2
TennCare ⁴	NAS births, rate per 1,000 births*	20.0	20.9	20.1

Table 2. Rate of Low Birthweight Infants among TennCare Enrolled Mothers by Region^{1,4*}

Region	2019 Rate	2020 Rate	2021 Rate
Chattanooga and Hamilton County Metro	10.0%	11.5%	12.0%
East Tennessee	9.5%	10.0%	9.3%
Jackson and Madison County Metro	8.8%	10.6%	10.2%
Knox County Metro	8.8%	10.5%	9.9%
Mid-Cumberland	9.1%	9.4%	9.8%
Nashville and Davidson County Metro	10.9%	10.9%	12.1%
Northeast Tennessee	9.7%	9.0%	10.1%
Shelby County Metro	13.4%	13.2%	14.0%
South Central Tennessee	11.2%	10.0%	9.9%
Southeast Tennessee	9.0%	9.1%	10.1%
Sullivan County Metro	8.7%	9.3%	8.5%
Upper Cumberland	8.0%	8.5%	10.5%
West Tennessee	10.4%	10.9%	11.1%
Statewide	10.4%	10.6%	11.0%

Definitions: Low birthweight births were defined as <2500 grams. Birthweights <227 or >8165 grams were considered implausible per National Center for Health Statistics guidance. Birthweight implausible or missing from records were excluded. Births were included if the mother had TennCare and the mother's residence was Tennessee at the time of childbirth.

Data Source: ¹Tennessee Department of Health; Division of Vital Records and Statistics; Birth Statistical System, 2019-2021.

⁴TennCare, Office of Healthcare Informatics, 2019-2021.

** Indicates lower number is better*

Table 3. Rate of Preterm Birth among TennCare Enrolled Mothers by Region^{1,4*}

Region	2019 Rate	2020 Rate	2021 Rate
Chattanooga and Hamilton County Metro	8.5%	12.0%	10.3%
East Tennessee	10.5%	10.8%	10.2%
Jackson and Madison County Metro	11.5 %	12.4%	11.6%
Knox County Metro	9.6 %	10.2%	11.1%
Mid-Cumberland	10.0%	11.1%	10.3%
Nashville and Davidson County Metro	10.7%	13.2%	12.9%
Northeast Tennessee	10.3%	9.6%	12.1%
Shelby County Metro	20.2%	20.5%	14.5%
South Central Tennessee	11.0%	12.0%	11.8%
Southeast Tennessee	8.3%	10.8%	10.8%
Sullivan County Metro	10.0%	8.0%	10.2%
Upper Cumberland	9.7%	10.4%	11.3%
West Tennessee	12.7%	12.7%	11.9%
Statewide	12.1%	13.0%	11.8%

Definitions: Preterm is defined as <37 weeks. Gestational age was considered implausible if <17 or >47 weeks. Gestational age implausible or missing from records were excluded. Births were included if the mother had TennCare and the mother's residence was Tennessee at the time of childbirth.

Data Source: ¹Tennessee Department of Health; Division of Vital Records and Statistics; Birth Statistical System, 2019-2021.

⁴TennCare, Office of Healthcare Informatics, 2019-2021.

** Indicates lower number is better*